

Engineering Requirements	Weight	Weight	Friction from Socket	Attach/Detach Time	Adjustment Height Range	Diameter of Socket	Applied Force	Cost	Factor of Safety	Modulus of Elasticity
Customer Requirements	Weight	Weight	Friction from Socket	Attach/Detach Time	Adjustment Height Range	Diameter of Socket	Applied Force	Cost	Factor of Safety	Modulus of Elasticity
Lightweight	5	9					3	3	3	
Comfortable	4		9					1	3	
Quick Attachment	3			9						
Adjustable	5			3	9	9		3	3	
Durable	5	3					9	3	9	9
Portable	5	3			3	3				
Affordable	4	1	3		1	1		9		3
Not Dangerous	5						1		9	1
<b>Units</b>		kg	unitless	sec	cm	cm	N	\$	unitless	GPa
<b>Target Value</b>		<1 kg	N/A	<30sec	<15	7<>20	>800	N/A	3	>70
<b>Absolute Technical Importance</b>		79	48	42	64	64	60	85	87	57
<b>Relative Technical Importance</b>		15%	9%	8%	12%	12%	11%	16%	16%	11%
<b>Rank Order of Importance</b>		2	5	6	3	3	4	1	1	4

**Appendix A1: House of Quality**